(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 14 April 2005 (14.04.2005)

PCT

(10) International Publication Number WO 2005/033207 A1

(51) International Patent Classification⁷: C08G 77/12

C08L 83/04,

(21) International Application Number:

PCT/JP2004/013724

(22) International Filing Date:

14 September 2004 (14.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2003-343622

1 October 2003 (01.10.2003) JP

- (71) Applicant (for all designated States except US): DOW CORNING TORAY SILICONE CO., LTD. [JP/JP]; 1-3, Marunouchi 1-chome, Chiyoda-ku, Tokyo, 1000005 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MORITA, Yoshitsugu [JP/JP]; c/o Dow Corning Toray Silicone Co., Ltd., 2-2, Chigusakaigan, Ichihara-shi, Chiba, 2990108 (JP). TERADA, Masayoshi [JP/JP]; c/o Dow Corning Toray Silicone Co., Ltd., 2-2, Chigusakaigan, Ichihara-shi, Chiba, 2990108 (JP). ENAMI, Hiroji [JP/JP]; c/o Dow Corning Toray Silicone Co., Ltd., 2-2, Chigusakaigan,

Ichihara-shi, Chiba, 2990108 (JP). KATO, Tomoko [JP/JP]; c/o Dow Corning Toray Silicone Co., Ltd., 2-2, Chigusakaigan, Ichihara-shi, Chiba, 2990108 (JP).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CURABLE ORGANOPOLYSILOXANE COMPOSITION AND SEMICONDUCTOR DEVICE

(57) Abstract: A curable organopolysiloxane composition comprising (A) a linear organopolysiloxane having at least two alkenyl groups and at least one aryl group per molecule, (B) a branched organopolysiloxane having at least one alkenyl group and at least one aryl group per molecule, and having siloxane units represented by the general formula: RsiO_{2/3}, (C) a linear organopolysiloxane with both terminal ends of the molecular chain blocked by silicon bonded hydrogen atoms having at least one aryl group per molecule, and (D) a hydrosilation reaction catalyst, and a semiconductor device whose semiconductor elements are coated with the cured product of the above-described composition. The curable organopolysiloxane composition shows low viscosity, excellent filling properties, and excellent curability that cures to form a soft cured product of a large refractive index, high light transmittance, and high adhesion to substrates, as well as the semiconductor device shows superior reliability.

